

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P598644

Luminaire Tested: **IFLD-L-SA8D-727-U-SLR**

Issue Date: 05/03/2022

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

**Test Information**

Test Method: LM-79-08  
 Report Number: P598644  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 05/03/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: IFLD-L-SA8D-727-U-SLR  
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLR distribution lens  
 Light Source: (128) 2700K CCT, 70 CRI LEDS  
 Ballast/Driver: ELECTRONIC DRIVER

**Summary**

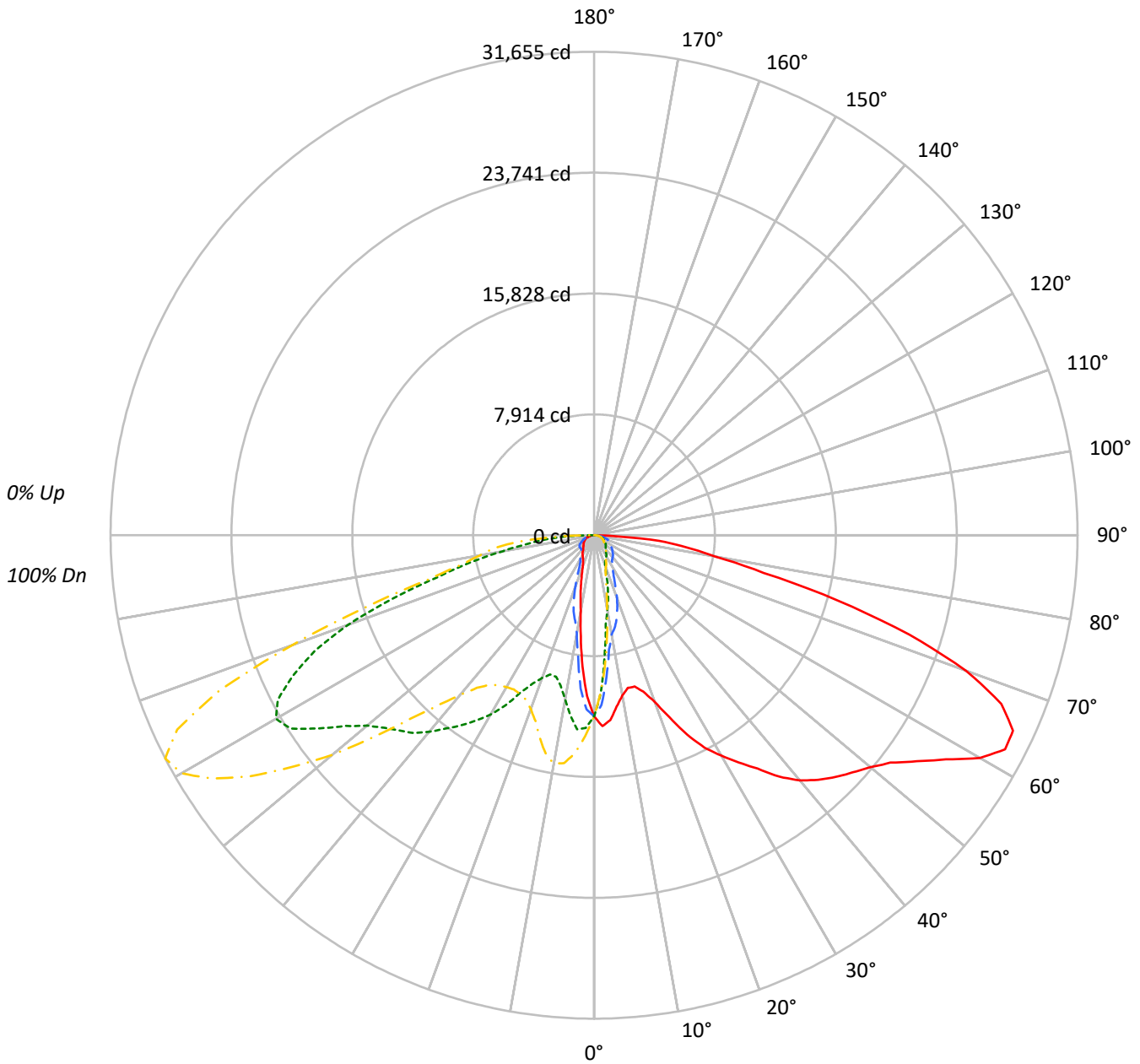
Lumens per Lamp: N/A  
 Luminaire Lumens: 39655.5 lumens  
 Efficiency: N/A  
 Efficacy: 81.2 lumens/watt  
 Spacing Criteria (0/90/45): 1.13 / 0.53 / 0.8  
 Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
 CIE Type: Direct

Input Watts (W): 488.3  
 Input Voltage (V): 120  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 25 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

TEST NUMBER: P598644  
CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - · 90°-270°    - · - · 135°-315°

TEST NUMBER: P598644  
 CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	100	100	100	100		
	1	105	99	94	89	102	97	92	87	92	88	84	88	85	82	85	82	79	79	77	77	77	77	77		
	2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	65	61	61	59	59	59	59	59		
	3	83	70	60	52	80	68	59	51	65	57	50	62	55	49	59	53	48	48	46	46	46	46	46		
	4	74	60	49	41	72	59	49	41	56	47	40	53	46	40	51	44	39	39	36	36	36	36	36		
	5	68	52	42	34	65	51	41	34	49	40	33	47	39	33	45	38	32	32	30	30	30	30	30		
	6	62	46	36	28	60	45	35	28	43	34	28	41	34	28	40	33	27	27	25	25	25	25	25		
	7	57	41	31	24	55	40	31	24	39	30	24	37	29	24	36	29	23	23	21	21	21	21	21		
	8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	20	18	18	18	18	18		
	9	49	34	25	19	47	33	24	18	32	24	18	31	23	18	30	23	18	18	16	16	16	16	16		
	10	46	31	22	17	44	31	22	17	29	22	16	28	21	16	28	21	16	16	14	14	14	14	14		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	63754	63754	63754	63754
5°	65610	42665	46609	68927
10°	58209	27110	27382	59569
15°	57128	19228	18211	53431
20°	66420	12163	12258	56918
25°	85418	10443	10147	67290
30°	103516	9898	9280	84236
35°	122520	8721	8393	99848
40°	147216	8276	7693	117960
45°	170347	8208	7451	137515
50°	197811	8334	7501	162388
55°	242073	8562	7628	206890
60°	313947	8572	8036	258765
65°	385375	8662	8239	276988
70°	407790	9138	8615	269685
75°	343268	9659	8625	220105
80°	249389	11313	8740	190256
85°	264319	16395	7169	197727

TEST NUMBER: P598644  
 CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	916.8	2.3
10°-20°	1918.7	4.8
20°-30°	2765.0	7.0
30°-40°	3980.5	10.0
40°-50°	5654.0	14.3
50°-60°	8128.9	20.5
60°-70°	9391.5	23.7
70°-80°	5317.6	13.4
80°-90°	1582.6	4.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	5600.4	14.1
0°-40°	9580.9	24.2
0°-60°	23363.8	58.9
0°-90°	39655.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	39655.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	11846	11846	11846	11846	11846	
5°	12144	7897	8627	12758	12144	1102
15°	10253	3451	3268	9590	10253	3015
25°	14384	1759	1709	11332	14384	6676
35°	18648	1327	1278	15197	18648	11835
45°	22381	1078	979	18067	22381	17330
55°	25799	912	813	22049	25799	23365
65°	30262	680	647	21750	30262	29019
75°	16508	464	415	10585	16508	17516
85°	4280	266	116	3202	4280	4263
90°	0	0	0	0	0	

TEST NUMBER: P598644  
 CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8
2.5°	12509.4	12492.9	12393.3	12078.1	11746.3	11431.0	11132.4	10817.2	10651.3	10452.2	10369.2
5°	12144.4	12111.3	11829.2	11132.4	10518.6	9854.9	9290.8	8842.9	8477.9	8112.9	7980.2
7.5°	11314.9	11265.1	10933.3	9971.1	9075.2	8212.4	7532.2	6951.5	6470.4	6254.7	6005.9
10°	10651.3	10568.3	10137.0	9075.2	7913.8	7051.1	6603.1	6205.0	5790.2	5441.8	5076.8
12.5°	10236.5	10137.0	9689.0	8444.7	7316.5	6669.5	6205.0	5757.0	5242.7	4811.3	4413.1
15°	10253.1	10137.0	9589.5	8278.8	7167.2	6337.7	5690.6	5076.8	4479.5	3998.4	3550.4
17.5°	10734.2	10584.9	10004.2	8511.1	7051.1	5906.3	5043.6	4247.2	3567.0	3052.7	2687.7
20°	11597.0	11497.4	10833.8	8859.5	6934.9	5441.8	4380.0	3417.7	2704.3	2306.1	2156.8
22.5°	12891.0	12774.9	12061.5	9390.4	6901.8	5027.0	3666.6	2687.7	2173.4	2007.5	1924.5
25°	14384.2	14168.5	13504.9	10286.3	6968.1	4645.4	3085.9	2223.2	1941.1	1825.0	1775.2
27.5°	15678.3	15545.6	14799.0	11132.4	7001.3	4346.8	2687.7	2024.1	1808.4	1708.8	1675.7
30°	16657.1	16607.4	15877.4	12061.5	6918.4	3981.8	2438.8	1941.1	1808.4	1708.8	1609.3
32.5°	17636.0	17652.6	16872.8	12774.9	6802.2	3666.6	2206.6	1725.4	1592.7	1526.4	1542.9
35°	18648.0	18731.0	18067.4	13471.7	6553.4	3550.4	2040.7	1609.3	1493.2	1393.6	1343.9
37.5°	19925.5	20141.2	19494.2	14251.5	6304.5	3450.9	1957.7	1526.4	1410.2	1327.3	1260.9
40°	20954.1	21352.3	20970.7	14981.5	6138.6	3334.7	1891.3	1443.4	1360.4	1260.9	1211.1
42.5°	21717.3	22181.9	22049.1	15545.6	6138.6	3218.6	1825.0	1393.6	1327.3	1211.1	1144.8
45°	22381.0	22862.1	22845.5	16126.2	6271.3	3152.2	1742.0	1393.6	1294.1	1177.9	1111.6
47.5°	22978.2	23459.4	23625.3	16856.2	6487.0	3119.1	1642.5	1360.4	1294.1	1161.4	1061.8
50°	23625.3	24156.2	24653.9	18017.6	6752.4	3036.1	1576.1	1310.7	1310.7	1144.8	1028.6
52.5°	24454.8	25052.1	25964.6	19461.0	7017.9	2886.8	1476.6	1277.5	1310.7	1128.2	995.4
55°	25798.7	26296.4	27490.9	21186.4	7349.7	2704.3	1393.6	1194.5	1244.3	1078.4	945.7
57.5°	27308.4	27739.8	28735.2	22513.7	7449.3	2472.0	1277.5	1111.6	1194.5	1028.6	879.3
60°	29166.6	29382.3	29382.3	22895.3	7117.4	2256.3	1194.5	1045.2	1078.4	978.9	829.5
62.5°	30344.5	30344.5	29382.3	22198.5	6487.0	2073.8	1128.2	978.9	945.7	912.5	779.8
65°	30261.6	30128.8	28702.0	20174.4	5757.0	1957.7	1061.8	895.9	846.1	829.5	730.0
67.5°	28867.9	28635.7	26694.6	17320.8	4993.8	1907.9	995.4	812.9	779.8	746.6	663.6
70°	25914.8	25317.5	22928.5	13936.3	4247.2	1874.8	978.9	746.6	713.4	680.2	613.9
72.5°	21634.4	20871.2	17901.4	10717.6	3567.0	1758.6	929.1	663.6	647.0	613.9	547.5
75°	16507.8	15097.6	12492.9	8195.8	2770.7	1526.4	796.4	580.7	580.7	564.1	497.7
77.5°	11381.3	10651.3	8710.2	6055.6	2024.1	1177.9	647.0	514.3	514.3	530.9	464.5
80°	8046.5	7366.3	6205.0	4346.8	1277.5	796.4	497.7	431.4	481.1	514.3	431.4
82.5°	6155.2	5657.5	4612.2	3168.8	746.6	547.5	381.6	348.4	414.8	448.0	365.0
85°	4280.4	3683.2	2339.3	2123.6	431.4	331.8	282.0	282.0	365.0	448.0	331.8
87.5°	1211.1	514.3	149.3	630.4	182.5	132.7	99.5	66.4	99.5	99.5	66.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P598644  
 CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8
2.5°	10286.3	10186.7	10186.7	10153.6	10170.1	10186.7	10170.1	10286.3	10336.1	10402.4	10535.1
5°	7897.2	8029.9	7930.4	8029.9	8162.7	8361.8	8411.5	8560.8	8577.4	8693.6	8627.2
7.5°	5856.5	5840.0	5757.0	5873.1	6238.1	6520.2	6652.9	6735.9	6752.4	6752.4	6669.5
10°	4960.6	4811.3	4662.0	4579.1	4612.2	4910.9	5010.4	5060.2	5027.0	5076.8	5010.4
12.5°	4247.2	4114.5	3898.8	3749.5	3650.0	3732.9	3832.5	3882.2	3915.4	3998.4	4064.7
15°	3450.9	3318.2	3185.4	3102.5	3019.5	2953.2	3036.1	3085.9	3168.8	3235.2	3268.4
17.5°	2621.3	2555.0	2488.6	2538.4	2538.4	2505.2	2538.4	2555.0	2588.2	2637.9	2621.3
20°	2123.6	2107.0	2090.4	2173.4	2239.8	2239.8	2272.9	2223.2	2206.6	2156.8	2140.2
22.5°	1891.3	1891.3	1907.9	1974.3	2040.7	2073.8	2073.8	1990.9	1907.9	1874.8	1891.3
25°	1758.6	1758.6	1808.4	1825.0	1858.2	1858.2	1874.8	1791.8	1742.0	1692.3	1708.8
27.5°	1659.1	1659.1	1675.7	1675.7	1692.3	1692.3	1708.8	1675.7	1609.3	1592.7	1592.7
30°	1592.7	1592.7	1576.1	1576.1	1576.1	1576.1	1592.7	1542.9	1509.8	1493.2	1493.2
32.5°	1526.4	1509.8	1493.2	1493.2	1476.6	1476.6	1493.2	1443.4	1426.8	1426.8	1426.8
35°	1327.3	1310.7	1327.3	1360.4	1360.4	1377.0	1377.0	1360.4	1327.3	1294.1	1277.5
37.5°	1244.3	1227.7	1227.7	1227.7	1260.9	1277.5	1294.1	1260.9	1211.1	1161.4	1161.4
40°	1177.9	1177.9	1161.4	1161.4	1161.4	1194.5	1227.7	1177.9	1111.6	1095.0	1095.0
42.5°	1128.2	1111.6	1095.0	1078.4	1061.8	1111.6	1144.8	1078.4	1045.2	1045.2	1045.2
45°	1078.4	1061.8	1045.2	1028.6	1012.0	1028.6	1061.8	995.4	978.9	978.9	978.9
47.5°	1028.6	1012.0	978.9	962.3	945.7	945.7	978.9	929.1	912.5	929.1	929.1
50°	995.4	962.3	929.1	912.5	895.9	895.9	895.9	879.3	879.3	879.3	895.9
52.5°	962.3	929.1	879.3	862.7	846.1	846.1	846.1	846.1	829.5	846.1	862.7
55°	912.5	879.3	846.1	829.5	812.9	796.4	812.9	796.4	796.4	812.9	812.9
57.5°	846.1	812.9	779.8	779.8	763.2	763.2	779.8	763.2	763.2	779.8	779.8
60°	796.4	763.2	730.0	730.0	713.4	730.0	746.6	730.0	730.0	730.0	746.6
62.5°	730.0	713.4	680.2	680.2	680.2	680.2	696.8	680.2	696.8	696.8	696.8
65°	680.2	647.0	630.4	630.4	630.4	630.4	663.6	630.4	647.0	647.0	647.0
67.5°	630.4	597.3	580.7	580.7	580.7	580.7	613.9	580.7	597.3	613.9	597.3
70°	580.7	547.5	530.9	530.9	530.9	530.9	547.5	530.9	530.9	547.5	547.5
72.5°	514.3	497.7	481.1	481.1	464.5	481.1	497.7	481.1	481.1	481.1	481.1
75°	464.5	448.0	448.0	431.4	431.4	431.4	448.0	414.8	414.8	414.8	414.8
77.5°	431.4	398.2	398.2	398.2	381.6	398.2	381.6	348.4	348.4	348.4	348.4
80°	365.0	331.8	348.4	348.4	331.8	331.8	315.2	282.0	282.0	282.0	282.0
82.5°	298.6	265.5	282.0	282.0	282.0	282.0	248.9	232.3	215.7	199.1	199.1
85°	265.5	215.7	248.9	248.9	232.3	232.3	165.9	165.9	132.7	132.7	116.1
87.5°	49.8	33.2	66.4	83.0	83.0	99.5	66.4	83.0	49.8	33.2	33.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P598644  
 CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8
2.5°	10518.6	10701.1	10949.9	11132.4	11414.5	11630.1	11961.9	12244.0	12509.4	12625.6	12741.7
5°	8826.3	8942.4	9324.0	9622.6	10070.6	10551.7	11149.0	11796.0	12459.7	12758.3	13106.7
7.5°	6603.1	6818.8	7034.5	7465.8	8013.3	8793.1	9556.3	10518.6	11447.6	11895.6	12492.9
10°	5126.5	5292.5	5541.3	5989.3	6503.6	7150.6	8063.1	9207.9	10319.5	10900.1	11514.0
12.5°	4114.5	4346.8	4678.6	5143.1	5740.4	6404.0	7067.7	8129.5	9423.6	10087.2	10784.0
15°	3334.7	3517.2	3882.2	4462.9	5159.7	5840.0	6536.8	7416.1	8826.3	9589.5	10419.0
17.5°	2654.5	2787.3	3119.1	3699.7	4396.6	5159.7	5956.1	7067.7	8627.2	9556.3	10535.1
20°	2156.8	2256.3	2472.0	2903.4	3567.0	4396.6	5392.0	6735.9	8743.3	9937.9	11132.4
22.5°	1891.3	1924.5	2024.1	2256.3	2803.8	3683.2	4877.7	6453.8	8959.0	10502.0	12111.3
25°	1708.8	1742.0	1775.2	1924.5	2239.8	3069.3	4429.7	6287.9	9423.6	11331.5	13239.4
27.5°	1592.7	1625.9	1642.5	1708.8	1924.5	2621.3	4048.1	6188.4	10054.0	12542.6	14633.1
30°	1493.2	1493.2	1542.9	1642.5	1791.8	2306.1	3716.3	5956.1	10717.6	13554.7	15728.1
32.5°	1410.2	1426.8	1493.2	1542.9	1642.5	2040.7	3384.5	5657.5	11314.9	14384.2	16806.5
35°	1260.9	1260.9	1277.5	1360.4	1493.2	1825.0	3085.9	5358.8	11646.7	15197.2	17768.7
37.5°	1161.4	1177.9	1211.1	1277.5	1393.6	1675.7	2837.0	5027.0	11995.1	15960.3	18896.9
40°	1095.0	1111.6	1144.8	1211.1	1327.3	1542.9	2621.3	4761.6	12360.1	16789.9	20108.0
42.5°	1045.2	1061.8	1095.0	1161.4	1260.9	1509.8	2389.1	4545.9	12575.8	17553.0	21252.8
45°	995.4	1012.0	1061.8	1128.2	1211.1	1476.6	2256.3	4396.6	12658.8	18067.4	22165.3
47.5°	945.7	962.3	1012.0	1111.6	1211.1	1426.8	2206.6	4313.6	12725.1	18648.0	22895.3
50°	895.9	929.1	995.4	1095.0	1227.7	1360.4	2173.4	4297.0	13106.7	19394.6	23592.1
52.5°	862.7	912.5	978.9	1095.0	1211.1	1260.9	2156.8	4346.8	13869.9	20506.2	24587.5
55°	829.5	879.3	945.7	1095.0	1161.4	1177.9	2073.8	4429.7	15031.2	22049.1	25997.7
57.5°	796.4	829.5	912.5	1061.8	1095.0	1111.6	1907.9	4545.9	16192.6	23558.9	27441.1
60°	746.6	779.8	862.7	1061.8	995.4	1045.2	1692.3	4579.1	17022.1	24040.0	27573.9
62.5°	696.8	730.0	812.9	1095.0	912.5	978.9	1509.8	4462.9	17188.0	23343.2	26827.3
65°	647.0	680.2	746.6	912.5	846.1	912.5	1393.6	4147.7	16640.5	21750.5	25466.8
67.5°	597.3	630.4	680.2	746.6	763.2	829.5	1343.9	3650.0	15263.5	19776.2	23608.7
70°	530.9	564.1	613.9	663.6	680.2	779.8	1260.9	3168.8	13040.3	17138.3	21335.7
72.5°	481.1	497.7	547.5	580.7	613.9	713.4	1211.1	2770.7	9971.1	13869.9	17403.7
75°	414.8	414.8	464.5	497.7	530.9	630.4	1111.6	2306.1	7034.5	10584.9	12791.5
77.5°	348.4	348.4	381.6	414.8	448.0	547.5	945.7	1874.8	4877.7	8394.9	9274.2
80°	265.5	265.5	298.6	331.8	365.0	464.5	763.2	1377.0	3019.5	6138.6	6752.4
82.5°	182.5	182.5	232.3	248.9	265.5	365.0	580.7	945.7	1775.2	4429.7	4827.9
85°	99.5	99.5	132.7	149.3	182.5	265.5	431.4	663.6	1061.8	3202.0	3218.6
87.5°	16.6	16.6	49.8	49.8	83.0	132.7	248.9	365.0	597.3	1775.2	1128.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P598644  
 CATALOG NUMBER: IFLD-L-SA8D-727-U-SLR

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8	11845.8
2.5°	12957.4	13139.9	13156.5	13156.5	13073.5	13090.1	12857.9	12609.0	12526.0	12509.4
5°	13637.6	14118.8	14251.5	14317.8	14102.2	13770.3	13173.1	12526.0	12194.2	12144.4
7.5°	13504.9	14467.2	14981.5	15047.8	14616.5	13836.7	12791.5	11796.0	11414.5	11314.9
10°	12725.1	14019.2	14948.3	15180.6	14716.0	13720.6	12360.1	11198.8	10734.2	10651.3
12.5°	12177.6	13421.9	14334.4	14649.7	14434.0	13571.3	12144.4	10817.2	10352.6	10236.5
15°	11879.0	13023.8	13621.0	13720.6	13704.0	13339.0	12144.4	10900.1	10385.8	10253.1
17.5°	12127.9	12907.6	12990.6	12758.3	12891.0	13073.5	12409.9	11348.1	10850.4	10734.2
20°	12625.6	12857.9	12459.7	12111.3	12177.6	12758.3	12824.7	12194.2	11796.0	11597.0
22.5°	13670.8	13040.3	12127.9	11646.7	11696.5	12509.4	13372.2	13339.0	12990.6	12891.0
25°	14732.6	13554.7	12028.3	11464.2	11530.6	12459.7	14019.2	14616.5	14434.0	14384.2
27.5°	15910.6	14417.4	12094.7	11381.3	11464.2	12526.0	14467.2	15694.9	15728.1	15678.3
30°	16706.9	14832.2	12293.8	11480.8	11597.0	12691.9	14566.7	16341.9	16640.5	16657.1
32.5°	17370.5	15246.9	12708.5	11646.7	11845.8	12990.6	14832.2	16955.8	17619.4	17636.0
35°	17901.4	15711.5	13222.8	11945.4	12244.0	13488.3	15180.6	17536.4	18531.9	18648.0
37.5°	18581.7	16225.8	13820.1	12592.4	12924.2	14201.7	15794.4	18216.7	19610.3	19925.5
40°	19311.7	16740.1	14682.8	13637.6	14118.8	15263.5	16491.2	18979.8	20522.8	20954.1
42.5°	20124.6	17287.6	15661.7	15047.8	15777.8	16607.4	17287.6	19676.7	21219.6	21717.3
45°	20921.0	17951.2	17088.5	16972.4	17785.3	18200.1	18067.4	20174.4	21883.2	22381.0
47.5°	21485.1	18913.5	18813.9	19510.8	20273.9	20058.2	18979.8	20539.4	22430.7	22978.2
50°	21999.4	20108.0	20987.3	22347.8	22812.3	22082.3	19958.7	21037.1	23011.4	23625.3
52.5°	22762.5	21385.5	23227.1	24919.3	25367.3	24205.9	21020.5	21850.1	23907.3	24454.8
55°	24322.1	22828.9	25566.4	27507.5	27590.5	26147.1	22447.3	23227.1	25168.2	25798.7
57.5°	26064.1	24604.1	27424.6	29647.7	29614.5	28088.2	24056.6	25085.3	26877.1	27308.4
60°	27640.2	26395.9	29448.6	31174.1	31091.1	29498.4	25931.4	27192.3	28834.8	29166.6
62.5°	28569.3	28021.8	30344.5	31655.2	31340.0	29962.9	27524.1	29067.0	30228.4	30344.5
65°	28420.0	28950.9	29299.3	30112.3	29664.3	28668.9	28303.9	30261.6	30377.7	30261.6
67.5°	27291.8	28420.0	26429.1	26512.1	26279.8	25433.7	27092.7	29946.3	29150.0	28867.9
70°	25583.0	25665.9	22098.9	21053.7	21418.7	20257.3	23243.7	27490.9	26263.2	25914.8
72.5°	22746.0	21717.3	16706.9	15645.1	16192.6	15363.1	18648.0	23957.1	22762.5	21634.4
75°	19079.4	17204.6	12725.1	11215.4	11497.4	11464.2	14450.6	19792.8	17636.0	16507.8
77.5°	14782.4	13405.3	9390.4	8809.7	8511.1	8577.4	10087.2	14716.0	12791.5	11381.3
80°	10800.6	9373.8	7266.8	7598.6	7432.7	7034.5	7067.7	9854.9	8892.7	8046.5
82.5°	7465.8	6669.5	5889.7	6652.9	6254.7	5640.9	5508.1	7100.9	6669.5	6155.2
85°	5010.4	5491.5	4678.6	5093.4	4413.1	4064.7	5176.3	5939.5	4794.7	4280.4
87.5°	3268.4	5027.0	3367.9	2555.0	1460.0	1957.7	3168.8	3898.8	2239.8	1211.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)